

CITY OF TULLAHOMA, TENNESSEE  
STORMWATER MANAGEMENT ORDINANCE

1.0 GENERAL PROVISIONS

1.1 Purpose

It is the purpose of this ordinance to:

- (a) Protect, maintain, and enhance the environment of the City of Tullahoma and the public health, safety and the general welfare of the citizens of the city, by controlling discharges of pollutants to the city's stormwater system and maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the city.
- (b) Enable the City of Tullahoma to comply with the National Pollution Discharge Elimination System (NPDES) permit and applicable regulations, 40 CFR §122.26 for stormwater discharges.
- (c) Allow the City of Tullahoma to exercise the powers granted in Tennessee Code Annotated §68-221-1105, which provides that, among other powers municipalities have with respect to stormwater facilities, is the power by ordinance to:
  - (1) Exercise general regulation over the planning, location, construction, and operation and maintenance of stormwater facilities in the municipality, whether or not owned and operated by the municipality;
  - (2) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;
  - (3) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;
  - (4) Review and approve plans and plats for stormwater management in proposed subdivisions or commercial / industrial developments;

- (5) Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;
- (6) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
- (7) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and
- (8) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

## 1.2 Administering Entity

The Tullahoma Department of Public Works shall administer the provisions of this ordinance.

## 2.0 DEFINITIONS

For the purpose of this chapter, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The word “shall” is mandatory and not discretionary. The word “may” is permissive. Words not defined in this section shall have the meaning given by common and ordinary use as defined in the latest edition of Webster’s Dictionary.

- (1) "As built plans" means drawings depicting conditions as they were actually constructed.
- (2) "Base Flood" means the flood having a one percent chance of being equaled or exceeded in any given year (the 100-year flood).
- (3) "Base Flood Elevation" means the water-surface elevation associated with the base flood.
- (4) "Best Management Practices" or "BMPs" are physical, structural, and/or managerial practices that, used singly or in combination, prevent or reduce pollution of water, that have been approved by the City of Tullahoma, and that have been incorporated by reference into this ordinance as if fully set out therein.

- (5) "Channel" means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.
- (6) "Community Water" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the City of Tullahoma.
- (7) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.
- (8) "Design Storm Event" means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility.
- (9) "Director" means the Director of the Department of Public Works.
- (10) "Discharge" means dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the municipal separate storm sewer system.
- (11) "Easement" means an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, municipality or other legal entity has in the land of another.
- (12) "Equivalent Residential Unit" or "ERU" shall be the base unit of measure for the establishment of stormwater user's fees. One ERU shall be equal to the average square footage of a detached single-family residential property within the City of Tullahoma.
- (13) "Erosion" means the removal of soil particles by the action of water, wind, ice, or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.
- (14) "Erosion and Sediment Control Plan" means a written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.
- (15) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation.

- (16) "Floodway Fringe" means the area between the floodway boundary and the 100-year floodplain boundary.
- (17) "Governing Body" means the Tullahoma Board of Mayor and Aldermen
- (18) "Hotspot" ("priority area") means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.
- (19) "Illicit Connections" means illegal and/or unauthorized connections to the municipal separate stormwater system whether or not such connections result in discharges into that system.
- (20) "Illicit Discharge" means any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under §7.2.
- (21) "Land Disturbance and Stormwater Protection Permit" means a permit issued by the Department of Public Works to allow land disturbing activity as defined below.
- (22) "Land Disturbing Activity" means any activity on property that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, and excavation.
- (23) "Maintenance" means any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facility.
- (24) "Maintenance Agreement" means a document recorded in the land records that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.
- (25) "Municipal separate storm sewer system (MS4)" means the conveyances owned or operated by the municipality for the collection and transportation of stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channel, and storm drains.

- (26) "National Pollutant Discharge Elimination System Permit" or "NPDES permit" means a permit issued pursuant to 33 U.S.C. 1342.
- (27) "Off-site facility" means a structural BMP located outside the subject property boundary described in the permit application for land development activity.
- (28) "On-site facility" means a structural BMP located within the subject property boundary described in the permit application for land development activity.
- (29) "Peak flow" means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.
- (30) "Person" means any and all persons, including any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country.
- (31) "Priority Construction" means construction that occurs in a "hot spot" as previously defined.
- (32) "Runoff" means that portion of the precipitation on a drainage area that is discharged from the area into the municipal separate stormwater system.
- (33) "Sediment" means solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.
- (34) "Sedimentation" means soil particles suspended in stormwater that can settle in stream beds and disrupt the natural flow of the stream.
- (35) "Soils Report" means a study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report shall be prepared by a qualified soils engineer, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.
- (36) "Stabilization" means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.
- (37) "Stormwater" means stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.

- (38) "Stormwater management" means the programs to maintain quality and quantity of stormwater runoff to pre-development levels.
- (39) "Stormwater management facilities" means the drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated, or disposed of.
- (40) "Stormwater management plan" means the set of drawings and other documents that compiles all of the information and specifications for the programs, drainage systems, structures, BMPs, concepts and techniques intended to maintain or restore quality and quantity of stormwater runoff to pre-development levels.
- (41) "Stormwater runoff" means flow on the surface of the ground, resulting from precipitation.
- (42) "Structural BMPs" means devices that are constructed to provide control of stormwater runoff.
- (43) "Surface water" includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoirs.
- (44) "TDEC" means the Tennessee Department of Environment and Conservation, Division of Water Pollution Control
- (45) "Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.
- (46) "Watershed" means all the land area that contributes runoff to a particular watercourse.

### 3.0 LAND DISTURBANCE AND STORMWATER PROTECTION PERMITS

#### 3.1 When Required

Every person will be required to obtain a Land Disturbance and Stormwater Protection Permit from the Tullahoma Department of Public Works in the following cases:

- (a) Land disturbing activity disturbs one (1) or more acres of land;
- (b) Land disturbing activity of less than one (1) acre if such activity is part of a larger common plan of development that affects one (1) or more acres of land;

- (c) Land disturbing activity of less than one (1) acre of land, if in the discretion of the Public Works Department such activity poses a potential threat to the MS4 or Waters of the State.

### 3.2 Building Permit

No Building Permit shall be issued until the applicant has obtained a Land Disturbance and Stormwater Protection Permit where the same is required by this ordinance.

### 3.3 Exemptions

The following activities are exempt from the permit requirement:

- (a) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
- (b) Existing nursery and agricultural operations conducted as a permitted main or accessory use.

### 3.4 Application for a Land Disturbance and Stormwater Protection Permit

Each application for a Land Disturbance and Stormwater Protection permit shall contain the following:

- (a) Name of Applicant;
- (b) Business or residence address of Applicant;
- (c) Name, address and telephone number of the owner of the property of record in the office of the assessor of property;
- (d) Address and legal description of subject property including the tax reference number and parcel number of the subject property;
- (e) Name, address and telephone number of the contractor and any subcontractors who shall perform the land disturbing activity and who shall implement the erosion and sediment control plan;
- (f) A statement indicating the nature, extent and purpose of the land disturbing activity including the size of the area for which the permit shall be applicable and a schedule for the starting and completion dates of the land disturbing activity.
- (g) Each application shall be accompanied by:

- (i) A Stormwater Management Plan providing for stormwater management during construction and after construction has been completed.
- (ii) A copy of Notice of Intent (NOI) submitted to Tennessee Department of Environment and Conservation for coverage under General Stormwater Permit for Construction Activity, if required.
- (iii) Permit Review and Inspection Fees, as set by this ordinance.

### 3.5 Review and Approval of Application

The Department of Public Works will review each application for a Land Disturbance and Stormwater Protection Permit to determine its conformance with the provisions of this ordinance. Within 14 days after receiving an application, the Department shall provide one of the following responses in writing:

- (a) Approval of the permit application;
- (b) Approval of the permit application with conditions; subject to such reasonable conditions as may be necessary to secure substantially the objectives of this ordinance, and issue the permit subject to these conditions; or
- (c) Denial of the permit application, indicating the reason(s) for the denial.

If the Department of Public Works has granted approval of the permit with conditions, the applicant shall submit a revised plan that conforms to the conditions established by the Department, within 7 days of receipt of the conditional approval. However, the applicant shall be allowed to proceed with his land disturbing activity so long as it conforms to the conditions established by the Department.

No development plans (or building permit, if required) will be released until the Land Disturbance and Stormwater Protection Permit has been approved.

### 3.6 Permit Duration

Every Land Disturbance and Stormwater Protection Permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance. The work authorized by such permit shall not be suspended or



abandoned at any time after the work is commenced but shall be carried through to completion.

### 3.7 Pre-Construction Conference

A pre-construction conference will be mandatory for all priority construction activities. Priority construction activities will include the following:

- (a) Construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired (for siltation) or high quality
- (b) Construction activities that will result in the disturbance of 5 acres or more of property
- (c) Any other construction activities that the Department of Public Works deems should be considered a priority construction activity

The Department of Public Works may, at its discretion, require a pre-construction conference for any construction activity, regardless of whether or not the activity is classified as a priority construction activity.

### 3.8 Notice of Construction

The applicant must notify the Department of Public Works ten (10) days in advance of the commencement of construction. Regular inspections of the stormwater management system shall be conducted by the Department of Public Works. All inspections shall be documented and written reports prepared that contain the following information:

- (a) The date and location of the inspection;
- (b) Whether construction is in compliance with the approved Erosion and Sediment Control Plan and/or Stormwater Management Plan;
- (c) Variations from the approved construction specifications;
- (d) Any violations that may exist.

Copies of the inspection reports will be maintained at the Department of Public Works.

### 3.9 Performance Bonds

The Department of Public Works shall require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved Stormwater Management Plan. The amount of the performance bond shall be the total estimated construction cost of the structural BMPs and permanent infrastructure approved under the permit plus any reasonably foreseeable additional related costs. The Department may also require the submittal of a performance bond at any point during construction in an amount sufficient to cover all remaining items that have not yet been constructed. The performance bond shall contain forfeiture provisions for failure to complete work specified in the Stormwater Management Plan. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment or rejection by the Department of Public Works. The Department shall have the right to calculate the estimated cost of construction for the purpose of determining the required performance bond amount.

The performance bond shall be released in full only upon submission of as-built plans (if requested) and written certification by a registered professional engineer licensed to practice in Tennessee that the structural BMPs and infrastructure have been installed in accordance with the approved plan and other applicable provisions of this ordinance. Partial releases of the performance bond, based on the completion of various stages of construction, can be made at the discretion of the Department of Public Works.

#### 4.0 STORMWATER SYSTEM DESIGN AND MANAGEMENT STANDARDS

##### 4.1 Stormwater Design and BMP Manual

The City of Tullahoma adopts as its stormwater design and best management practices (BMP) manual the following publications, which are incorporated by reference in this ordinance as if fully set out herein:

- (a) TDEC Sediment and Erosion Control Handbook, second edition or subsequent editions as approved by Resolution of the Governing Body.
- (b) TDEC Manual for Post Construction, first edition or subsequent editions as approved by Resolution of the Governing Body.

These manuals include lists of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. Stormwater facilities that are designed,

constructed and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

#### 4.2 General Performance Criteria for Stormwater Management

Unless judged by the Department of Public Works to be exempt, the following performance criteria shall be addressed for stormwater management at all sites:

- (a) All site designs shall control the peak flow rates of stormwater discharge associated with design storms specified in this ordinance or in the BMP manual and reduce the generation of post construction stormwater runoff to pre-construction levels. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
- (b) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the BMP manual.
- (c) Stormwater discharges to critical areas with sensitive resources (i.e., shellfish beds, endangered species, swimming beaches, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices, at the discretion of the Department of Public Works.
- (d) Stormwater discharges from “hot spots” may require the application of specific structural BMPs and pollution prevention practices.
- (e) Prior to or during the site design process, applicants for Land Disturbance and Stormwater Protection Permits shall consult with the Department of Public Works to determine if they are subject to additional stormwater design requirements.
- (f) The permanent hydrologic data for each sub-area including total land area, appropriate runoff co-efficient, time of concentrations as calculated using the SCS-TR-55 method or approved equal, total runoff for the two (2), five (5), twenty-five (25), and one-hundred (100) year storm events for each area using the SCS-TR-55 method for drainage areas greater than 100 acres or rational method for drainage areas up to one-hundred (100) acres. Nashville

Tennessee intensity-duration-frequency curves shall be used for runoff calculations if local data is not available.

- (g) Hydraulic capacity of existing and proposed storm water conveyance structures and channels located on the site and off-site (two structures downstream) using Mannings Formula. Each structure or channel shall be capable of passing the referenced event without surcharge:
  - (1) Twenty-five (25) year design storm – Residential areas, minor street culverts.
  - (2) Fifty (50) year design storm - Major drainage channels (existing “blue-line” or intermittent streams), collector and minor arterial street culverts.
  - (3) One hundred (100) year design storm – Major Arterial street culverts

Each drainage structure and/or channel shall be designed to not cause flooding of any structure during the one-hundred year event.

- (h) Erosion control calculations for slopes having a grade of twenty (20) percent or greater and a length longer than twenty (20) feet for the applicable design storm event.
- (i) Net pre-construction and post construction runoff exiting the site resulting from the two (2), five (5), twenty-five (25), and one-hundred (100) year storm events using the SCS-TR-55 method for drainage areas greater than 100 acres or rational method for drainage areas up to one-hundred (100) acres. Runoff velocities shall also be determined.
- (j) Detention pond inflow/outflow calculations for the two (2), five (5), twenty-five (25), and one hundred (100) years storm events. Detention calculations shall include stage-storage calculations, elevation-discharge calculations, inflow hydrograph development, routing calculations, and discharge calculations. A one (1) foot minimum freeboard shall be maintained for each design storm event in the detention basin design. The design shall ensure post-development discharge rates do not exceed pre-development discharge rates for the two (2), five (5), and twenty-five (25) year storm events. The design shall ensure that the post-development discharge for the one hundred (100) year design storm can be managed safely by the detention facility, incorporating spillways as necessary, but not necessarily equaling pre-development discharge rates
- (k) If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream must be removed at a

frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets). Sediment that has reached a stream shall be reported to the Department of Public Works as soon as it is discovered. No attempts to remove sediment from a stream shall be made without prior approval. Appropriate arrangements will need to be made to enter private property for the purpose of removing sediment accumulations.

- (l) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and must be removed when design capacity has been reduced by 50%.
- (m) Offsite material storage areas (including overburden and stockpiles of dirt) used solely by the permitted project are considered a part of the project and shall be addressed in the Stormwater Management Plan.
- (n) Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than 20 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- (o) Clearing and grubbing must be held to a minimum necessary for grading and equipment operation.
- (p) Erosion and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures that may hamper construction activity may be removed at the beginning of the work day, but must be replaced at the end of the work day.
- (q) All criteria and requirements of the Tennessee General Permit for Stormwater Discharges from Construction Activities not specifically addressed in this ordinance shall be required by this ordinance. If a requirement of this ordinance conflicts with a requirement of the Tennessee General Permit, the more stringent of the two requirements shall apply.

#### 4.3 Stormwater Management Plan Requirements

The stormwater management plan shall include sufficient information to allow the Department of Public Works to evaluate the environmental

characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. To accomplish this goal, the stormwater management plan shall include the following:

(a) Topographic Base Map: A topographic base map of the site, at appropriate scale, which extends a minimum of 100 feet beyond the limits of the proposed development and indicates:

- (1) Existing surface water drainage including streams, ponds, culverts, ditches, sink holes, wetlands; and the type, size, elevation, etc., of nearest upstream and downstream drainage structures;
- (2) Current land use including all existing structures, locations of utilities, roads, and easements;
- (3) All other existing significant natural and artificial features;
- (4) Proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading;
- (5) Proposed structural BMPs;
- (6) A written description of the site plan and justification of proposed changes in natural conditions may also be required.

(b) Calculations

Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in Section 4.2 of this ordinance will be required. These calculations must show that the proposed stormwater management measures are capable of controlling runoff from the site in compliance with this ordinance and the guidelines of the BMP manual. Such calculations shall include:

- (1) A description of the design storm frequency, duration, and intensity where applicable;
- (2) Time of concentration;

- (3) Soil curve numbers or runoff coefficients including assumed soil moisture conditions,
- (4) Peak runoff rates and total runoff volumes for each watershed area;
- (5) Infiltration rates, where applicable;
- (6) Culvert, stormwater sewer, ditch and/or other stormwater conveyance capabilities;
- (7) Flow velocities;
- (8) Data on the increase in rate and volume of runoff for the design storms referenced in Section 4.2; and
- (9) Documentation of sources for all computational methods and field test results.

(c) Soils Information

If a stormwater management control measure depends on the hydrologic properties of soils, then a soils report shall be submitted. The soils report shall be based on on-site boring logs or soil pit profiles and soil survey reports. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure.

(d) Maintenance and Repair Plan

The design and planning of all stormwater management facilities shall include detailed maintenance and repair procedures to ensure their continued performance. These plans will identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan. A permanent elevation benchmark may be required to be identified in the plans to assist in the periodic inspection of the facility.

(e) Landscaping Plan

Where the management of adequate vegetation is required by the BMP, the applicant must present a detailed plan for the post-construction management of vegetation, including who will be responsible and what methods will be employed to ensure that adequate cover is preserved. At the discretion of the Department of Public Works, it may be required that this plan be prepared by a registered landscape architect licensed in Tennessee.

(f) Maintenance Easements

The applicant must ensure access to the site for the purpose of inspection and repair by securing all the maintenance easements needed. These easements must be binding on the current property owner and all subsequent owners of the property and must be properly recorded in the land record.

(g) Maintenance Agreement

(1) The Department of Public Works may require the owner of property to be served by an on-site stormwater management facility to execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owner and all subsequent property owners.

(2) The maintenance agreement shall:

- (i) Assign responsibility for the maintenance and repair of the stormwater facility to the owner of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.
- (ii) Provide for a periodic inspection by the property owner for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this ordinance. The property owner will arrange for this inspection to be conducted by a registered professional engineer licensed to practice in the State of Tennessee who will submit a sealed report of the inspection to the Department of Public Works. It shall also grant permission to the city to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.



- (iii) Provide that the minimum maintenance and repair needs include, but are not limited to: removal of silt, litter and other debris, the cutting of grass, the replacement of landscape vegetation, and all additional maintenance and repair needs consistent with the needs and standards outlined in the BMP manual.
- (iv) Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the Department of Public Works.
- (v) Provide that if the property is not maintained or repaired within the prescribed schedule, the Department of Public Works shall perform the maintenance and repair at its expense, and bill the same to the property owner.

(3) The Governing Body, upon recommendation of the Department of Public Works, shall have the discretion to accept the dedication of any existing or future stormwater management facility, provided such facility meets the requirements of this ordinance, and includes adequate and perpetual access and sufficient areas, by easement or otherwise, for inspection and regular maintenance. Any stormwater facility accepted by the municipality must also meet the municipality's construction standards and any other standards and specifications that apply to the particular stormwater facility in question.

(4) In general, a maintenance agreement will be required for stormwater structures constructed in conjunction with commercial and industrial developments. The acceptance of dedication of stormwater facilities will generally be limited to structures associated with residential developments. The Director of the Department of Public Works may require the public dedication of any structure or require a maintenance agreement for any structure, subject to final acceptance by the Governing Body.

(h) Sediment and Erosion Control Plans

The applicant must prepare a sediment and erosion control plan for all construction activities that complies with §4.4 below. It is anticipated that the Sediment and Erosion Control Plan and the Stormwater Pollution Prevention Plan required by the Tennessee General Permit will, in most cases, be the same plan.

#### 4.4 Sediment and Erosion Control Plan Requirements

The sediment and erosion control plan shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for off-site damage. The plan shall conform to the requirements found in the BMP manual and the Tennessee Construction General Permit, and shall include at least the following:

- (a) Project Description – Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.
- (b) A topographic map with contour intervals of five feet or less showing present conditions and proposed contours resulting from land disturbing activity.
- (c) All existing drainage ways, including intermittent streams and wet-weather conveyances. Include any designated floodways or flood plains.
- (d) A general description of existing land cover.
- (e) Stands of existing trees as they are to be preserved upon project completion, specifying their general location on the property. Differentiation shall be made between existing trees to be preserved, trees to be removed, and proposed trees to be planted.
- (f) Approximate limits of proposed clearing, grading, and filling.
- (g) Approximate flows of existing stormwater leaving any portion of the site.
- (h) A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.
- (i) Location, size and layout of proposed stormwater and sedimentation control improvements.
- (j) Proposed drainage network.
- (k) Proposed drain tile or waterway sizes.

- (l) Approximate flows leaving the site after construction and incorporating water run-off mitigation measures. The evaluation must include projected effects on property adjoining the site and on existing drainage facilities and systems. The plan must address the adequacy of outfalls from the development: when water is concentrated, what is the capacity of waterways, if any, accepting stormwater off-site; and what measures, including infiltration, sheeting into buffers, etc., are going to be used to prevent the scouring of waterways and drainage areas off-site, etc.
- (m) The projected sequence of work represented by the grading, drainage, and sedimentation and erosion control plans as related to other major items of construction, beginning with the initiation of excavation and including the construction of any sediment basins or detention/retention facilities or any other structural BMPs. Pre-construction vegetative ground cover shall not be disturbed more than 20 calendar days prior to grading or earth moving unless the area is seeded and mulched or other temporary cover is installed.
- (n) Specific remediation measures to prevent erosion and sedimentation run-off. Plans shall include detailed drawings of all control measures used; stabilization measures including vegetation and non-vegetation measures, both temporary and permanent, will be detailed. Detailed construction notes and a maintenance schedule shall be included for all control measures in the plan.
- (o) Proposed structures; location and identification of any proposed additional buildings, structures or development on the site.
- (p) The erosion control plan shall identify riparian buffer zones that must be established adjacent to all streams, including intermittent streams. The buffer (BF) zone shall comply with Section BF of the TDEC Erosion and Sediment Control Handbook. In general, BF zones shall be a minimum of 50 feet wide. The Department of Public Works shall have the authority to require wider BF zones where necessary to protect wetlands, steep slopes, impaired streams, or for any other reason deemed necessary for the protection of the receiving stream. In general, it is not the intention of this ordinance to require restrictive buffer zones around the banks of lakes or impoundments. The Director of Public Works, however, may require buffer zones around impoundments when deemed necessary to protect endangered species or to protect water quality downstream of the impoundment. The BF zone must be clearly marked with stakes and/or silt fence prior to the start of construction. Any disturbance that will take place within the BF zone, such as stream crossings,

must receive a BF zone variance from the Director of Public Works prior to the disturbance taking place. In subdivision developments, the BF zone shall be designated as open space and shall not be considered a part of any individual residential lots. The BF zone may be dedicated to the City of Tullahoma, Department of Public Works if the developer so chooses. For non-subdivision development, such as commercial developments, a drainage easement shall be established for the BF zone. The easement will stipulate that no disturbance can take place within the BF zone without applying for and receiving a BF zone variance from the Director of Public Works. BF zone variances shall be highly restricted to uses such as crossings, footpaths, utility rights of way, etc.

BF Zones along streams that are designated as impaired for sedimentation by the latest approved 303 (d) List, shall meet the requirements of the State of Tennessee's General NPDES Permit for Discharges of Stormwater Associated with Construction Activities.

## 5.0 POST CONSTRUCTION

### 5.1 As Built Plans

All applicants are required to submit actual as built plans for any structures located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A final inspection by the Department of Public Works is required before the final portion of performance bond will be released.

### 5.2 Stabilization Requirements

Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be revegetated according to a schedule approved by the Department of Public Works. The following criteria shall apply to revegetative efforts:

- (a) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.

- (b) Replanting with native woody herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.
- (c) Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one (1) year is achieved.

### 5.3 Records of Installation and Maintenance Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation of the stormwater facility, and of all maintenance and repairs to the facility, and shall retain the records for at least five (5) years. These records shall be made available to the Department of Public Works during inspection of the facility and at other reasonable times upon request.

### 5.4 Failure to Meet or Maintain Design or Maintenance Standards

If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this ordinance, the Department of Public Works, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the Department of Public Works shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible party shall effect maintenance and repair of the facility in an approved manner in a time period set by the Department of Public Works. In the event that corrective action is not undertaken within that time, the Department of Public Works may take necessary corrective action. The cost of any action taken by the Department of Public Works under this section shall be charged to the responsible party.

## 6.0 EXISTING LOCATIONS AND DEVELOPMENTS

Adoption of this ordinance shall in no way relieve the owners of existing stormwater structures of their responsibilities under previous grading or stormwater ordinances. Existing locations and developments shall comply with the provisions of this ordinance to the extent necessary to protect the existing stormwater system and Waters of the State. The Department of Public Works shall have the right to require owners of existing stormwater structures to comply

with the post construction maintenance and repair provisions of this ordinance, or any other provisions as may be deemed necessary to maintain the integrity of the stormwater system.

## 7.0 ILLICIT DISCHARGES

### 7.1 Scope

This section shall apply to all water generated on developed or undeveloped land entering the municipality's separate storm sewer system.

### 7.2 Prohibition of Illicit Discharges

No person shall introduce or cause to be introduced into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater. The commencement, conduct or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited except as follows:

- (a) Water line flushing or other potable water sources;
- (b) Landscape irrigation or lawn watering with potable water;
- (c) Rising ground water;
- (d) Groundwater infiltration to storm drains;
- (e) Pumped groundwater;
- (f) Foundation or footing drains;
- (g) Crawl space pumps;
- (h) Air conditioning condensation;
- (i) Springs;
- (j) Non-commercial washing of vehicles;
- (k) Natural riparian habitat or wetland flows;
- (l) Swimming pools (if dechlorinated to less than one PPM chlorine);
- (m) Fire fighting activities, and

- (n) Any other uncontaminated water source specifically approved by TDEC.
- (o) Discharges specified in writing by the Department of Public Works as being necessary to protect public health and safety.

### 7.3 Prohibition of Illicit Connections

The construction, use, maintenance or continued existence of illicit connections to the separate municipal storm sewer system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

### 7.4 Reduction of Stormwater Pollutants by Use of Best Management Practices

Any person responsible for a property, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

### 7.5 Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into stormwater or the municipal separate storm sewer system, the person shall take all necessary steps to ensure the discovery, containment, and clean-up of such release. The Department of Public Works shall be notified of the release within 24 hours of the discovery of the release. A written explanation of what caused the release and the actions that were taken to minimize the impacts of the release to the stormwater system and Waters of the State shall be submitted to the Department of Public Works within five (5) days of the discovery of the release.

## 8.0 RESTAURANT AND GROCERY STORE REQUIREMENTS

### 8.1 Written Management Plan

- (a) Restaurants, grocery stores, and other food preparation facilities shall prepare a written plan outlining the best management

practices that will be utilized to minimize impacts from their establishment to the quality or quantity of waters discharged to the Tullahoma MS4.

- (b) For existing facilities, the written plan shall be submitted to the Department of Public Works within 90 days of notification by the Department of the necessity of the Plan. For new facilities, the plan shall be submitted to the Department of Public Works as part of the initial Stormwater Management Plan. The plan shall be maintained on file at the establishment.
- (c) At a minimum, the plan shall address the following topics:
  - (1) Methods used to minimize the amount of liquid placed in dumpsters or compactors
  - (2) Methods used to keep rain water out of dumpsters
  - (3) Methods used to keep leaks and other wastewaters from dumpsters and compactors from entering the storm sewer system
  - (4) Procedure used to make sure all waste is contained in dumpsters and compactors
  - (5) Schedule for inspection of dumpsters and compactors for leaks or stains and inspection of dumpster and compactor area for litter
  - (6) Provisions for the immediate replacement of leaking dumpsters and compactors
  - (7) Methods used to keep all washwaters from equipment cleaning areas from entering the storm sewer system

## 8.2 Best Management Plan Implementation

Within 180 days of the completion of the written plan, all best management practices required to eliminate impacts to the stormwater system shall be in place and fully implemented.

## 8.3 Training

Within 60 days of the completion of the written plan, all employees shall be trained on the requirements of the plan and the proper procedures for complying with the plan. Training shall be repeated at least annually or anytime significant changes are made to the plan. Training records that indicate the topics covered and the individuals who were trained shall be maintained at the facility as a part of the written plan.



#### 8.4 Sanitary Sewer Connections

New or additional sanitary sewer connections that are needed to comply with the requirements of this ordinance shall be installed under the approval and direction of the Tullahoma Utility Board.

### 9.0 AUTO REPAIR AND SUPPLY SHOP REQUIREMENTS

#### 9.1 Written Management Plan

- (a) Auto repair shops, auto supply shops, and other auto related facilities that use or collect oils or other automobile fluids shall prepare a written plan outlining the best management practices that will be utilized to minimize impacts from their establishment to the quality or quantity of waters discharged to the Tullahoma MS4.
- (b) The written plan shall be submitted to the Department of Public Works within 90 days of notification by the Department of the necessity of the Plan. The plan shall be maintained on file at the establishment.
- (c) At a minimum, the plan shall address the following topics:
  - (1) Methods used to minimize the amount of liquids and greases placed in dumpsters or compactors
  - (2) Methods used to keep rain water out of dumpsters
  - (3) Methods used to keep leaks and other wastewaters from dumpsters and compactors from entering the storm sewer system
  - (4) Procedures used to contain all automotive fluids prior to use or disposal
  - (5) Schedule for inspection of dumpsters, compactors, and oil/fluid storage areas for leaks or stains and inspection of dumpster and compactor area for litter
  - (6) Provisions for the immediate replacement of leaking dumpsters, compactors, or fluid storage containers.
  - (7) Details of contracts or arrangements with outside vendors who collect waste oils or other fluids for disposal. Details shall include the name of the vendor, the final disposal or treatment location for the fluids, the method of disposal or treatment of the fluids, and the frequency of pick-up from the facility.

9.2 Best Management Plan Implementation

Within 180 days of the completion of the written plan, all best management practices required to eliminate impacts to the stormwater system shall be in place and fully implemented.

9.3 Training

Within 60 days of the completion of the written plan, all employees shall be trained on the requirements of the plan and the proper procedures for complying with the plan. Training shall be repeated at least annually or anytime significant changes are made to the plan. Training records that indicate the topics covered and the individuals who were trained shall be maintained at the facility as a part of the written plan.

9.4 Sanitary Sewer Connections

New or additional sanitary sewer connections that are needed to comply with the requirements of this ordinance shall be installed under the approval and direction of the Tullahoma Utility Board Wastewater Department.

10.0 GENERAL PROHIBITIONS

10.1 Blockage of Watercourses or Drains

It shall be unlawful for any person to dump refuse of any nature (including grass clippings, leaves, brush, garbage, scrap, or any other refuse) into a stream, ditch, storm sewer, or any other drain within the city or to place such refuse or cause such refuse to be placed in a manner in which it is likely to enter into any stream, ditch, storm sewer, or other drain either by natural or other means. It shall be unlawful to block a watercourse or drain by constructing a fence over the drain in any manner that restricts flow or that can catch debris, thus restricting flow.

10.2 Alteration of Watercourses or Drains

It shall be unlawful for any person to cause, permit, or allow the alteration of any stream, ditch, storm sewer or any other drain without written approval from the Department of Public Works and the acquisition of any State Permits that may be necessary for the performance of the alterations. Alterations may include, but not be limited to, a change in direction of flow, the addition of a structure such as a culvert or a bridge, or a change in size of a channel or pipe.

### 10.3 Unpermitted Discharge

It shall be unlawful for any person to discharge stormwater to any stream, ditch, storm sewer or any other storm drain within the city without first obtaining the required State Permit coverage as described below:

- (a) Construction sites that disturb one acre of land or more or are part of a larger common plan of development must apply for coverage under the Tennessee General Permit for Stormwater Discharges from Construction Activity.
- (b) Industrial facilities must apply for coverage under the Tennessee Stormwater Multi-Sector General Permit for Industrial Activities.

### 10.4 Contamination of Stormwater

It shall be unlawful for any industrial, commercial, or residential properties, including but not limited to restaurants, auto repair shops, auto supply shops, and large commercial parking areas, to contaminate stormwater runoff. All numerical or visual effluent limitations set by State permits or regulations shall apply under the provisions of this ordinance.

### 10.5 Construction Site Waste

It shall be unlawful for construction site operators to discard waste, including building materials, concrete truck washout, chemicals, litter, sanitary waste, or any other potential pollutants in a manner that may cause adverse impacts to water quality.

## 11.0 ENFORCEMENT

### 11.1 Enforcement Authority

The Director of the Department of Public Works or his designees shall have the authority to issue notices of violation and citations, and to impose the civil penalties provided in this section.

### 11.2 Notification of Violation

#### (a) Written Notice of Violation

Whenever the Director of the Department of Public Works finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the Director may serve upon such person written notice of the violation. Within a time specified in the notice, an

explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Director. Submission of this plan, as required, in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

Where there is work in progress that causes or constitutes in whole or in part, a violation of any provision of this ordinance, the City is authorized to issue a Notice of Violation that requires construction activity to stop immediately so as to prevent further or continuing violations or adverse effects. This Notice of Violation will serve as a Stop Work Order. All persons to whom the stop work order is directed, or who are involved in any way with the work or matter described in the stop work order shall fully and promptly comply therewith. The City may also undertake or cause to be undertaken, any necessary or advisable protective measures so as to prevent violations of this ordinance or to avoid or reduce the effects of noncompliance herewith. The cost of any such protective measures shall be the responsibility of the owner of the property upon which the work is being done and the responsibility of any person carrying out or participating in the work, and such cost shall be a lien upon the property.

(b) Administrative Orders

Whenever the Director finds that any permittee or other person discharging stormwater has violated this ordinance and has failed to respond appropriately to a Notice of Violation, an administrative order shall be issued as a progressive form of enforcement. The administrative order may include a compliance schedule set by the Director and may or may not include a civil penalty. In cases of gross violations of this ordinance or a permit issued hereunder, the Director may deem it appropriate to issue an administrative order as the initial notice of violation.

(c) Show Cause Hearing

The Director may order any person who violates this ordinance or a permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the hearing, the proposed enforcement action and the reasons for such actions, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served by registered or certified mail (return receipt

requested) at least ten (10) days prior to the hearing. Failure of the violator to show up at the hearing shall result in the initiation of the proposed enforcement action.

## 12.0 PENALTIES

### 12.1 Violations

Any person who shall commit any act declared unlawful under this ordinance, who violates any provision of this ordinance, who violates the provisions of any permit issued pursuant to this ordinance, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Department of Public Works, shall be guilty of a civil offense.

### 12.2 Penalties

Under the authority provided in Tennessee Code Annotated §68-221-1106, the municipality declares that any person violating the provisions of this ordinance may be assessed a civil penalty by the Department of Public Works of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

### 12.3 Measuring Civil Penalties

In assessing a civil penalty, the Director may consider the following:

- (a) The harm done to public health or the environment;
- (b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity.
- (c) The economic benefit, if any, gained by the violator;
- (d) The amount of effort put forth by the violator to remedy the violation;
- (e) Any unusual or extraordinary enforcement costs incurred by the municipality;

### 12.4 Recovery of Damages and Costs

In addition to the civil penalty, the municipality may recover all damages proximately caused by the violator to the municipality, which may include any reasonable expenses incurred in investigating violations of, and

enforcing compliance with, this ordinance, or any other actual damages caused by the violation.

#### 12.5 Remedies Cumulative

The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

### 13.0 APPEALS

Pursuant to Tennessee Code Annotated §68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this ordinance may appeal said penalty or damage assessment to the stormwater board of appeals.

#### 13.1 Stormwater Board of Appeals

The Stormwater Board of Appeals shall consist of five (5) members, appointed by the Governing Body. Each member must be a resident of the City of Tullahoma. Each member shall be appointed to a term of three years, with the first terms to be staggered as follows: two (2) members appointed to one (1) year terms, two (2) members appointed to two (2) year terms, and one (1) member appointed to a three (3) year term. The Stormwater Board of Appeals shall meet as needed.

The Stormwater Board of Appeals is hereby authorized to hear and decide appeals of any order, decision or ruling of the Director of Public Works or his designee issued pursuant to these regulations. Following the hearing on an application for appeal, the Stormwater Board of Appeals may affirm, reverse, modify, or remand for more information, the order, decision or ruling of the Director of Public Works or his designee. In no event shall the Stormwater Board of Appeals issue a decision that in any way conflicts or contradicts these regulations or any other federal, state, or local laws or regulations relating to stormwater, wastewater, zoning, or planning.

#### 13.2 Appeals to be in Writing

The appeal shall be in writing and filed with the Director of Public Works within thirty (30) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

#### 13.3 Public Hearing

Upon receipt of an appeal, the Stormwater Board of Appeals shall hold a public hearing within thirty (30) days. At least ten (10) days prior notice of the time, date, and location of said hearing shall be published in a newspaper of general circulation. Ten (10) days notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the stormwater board of appeals shall be final.

#### 13.4 Appealing Decisions of the Stormwater Board of Appeals

Any alleged violator may appeal a decision of the Stormwater Board of Appeals pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

### 14.0 FUNDING MECHANISMS

Funding for the stormwater management activities described in this ordinance may include, but not be limited to, the following:

- (1) Stormwater user's fees
- (2) Civil Penalties and Damage Assessments
- (3) Permit and Inspection Fees
- (4) Other funds or income obtained from federal, state, local, and private grants, or revolving funds, and from the Local Government Public Obligations Act of 1986 (Tennessee Code Annotated, title 9, chapter 21).

To the extent that the above listed revenues are insufficient to construct needed stormwater drainage facilities, the cost of the same may be paid from such city funds as may be determined by the municipality's governing body.

### 15.0 FEE SCHEDULE

#### 15.1 Permit Review and Inspection Fees

A fee shall be assessed for each Land Disturbance and Stormwater Protection Permit as set forth in the following table:

<u>DISTURBED ACREAGE</u>	<u>RESIDENTIAL</u>	<u>COMMERCIAL/INDUSTRIAL</u>
0.01 - 0.99	\$100	\$250
1.00 – 4.99	\$150	\$350
5.00 – 14.99	\$250	\$500
15.00 – 29.99	\$400	\$800
30.00 or more	\$750	\$1,500

The review and inspection fees are based on acreage to be disturbed during the construction of the project. If a proposed acreage of disturbance is not provided, the fee will be based on the total project acreage.

## 15.2 Stormwater User's Fee

The Governing Body shall have the authority to impose, by resolution, on each and every developed property in the city a stormwater user's fee. Prior to establishing or amending user's fees, the municipality shall advertise its intent to do so by publishing notice in a newspaper of general circulation in the city at least thirty (30) days in advance of the meeting of the municipality's governing body which shall consider the adoption of the fee or its amendment.

If the Governing Body chooses to impose a stormwater user's fee, it shall be based on the establishment of an Equivalent Residential Unit (ERU). The ERU shall be the average square footage of a detached single-family residential property. The City Board shall have the discretion to determine the source of the data from which the ERU is established.

### (a) Property Classifications

For purposes of determining the stormwater user's fee, all properties in the city are classified into one of the following classes:

- (1) Single-family residential property;
- (2) Other developed property;

### (b) Single Family Residential Fee

The municipality's governing body finds that the intensity of development of most parcels of real property in the municipality classified as single family residential is similar and that it would be excessively and unnecessarily expensive to determine precisely the square footage of the improvements (such as buildings, structures, and other impervious areas) on each such parcel. Therefore, all single family residential properties in the city shall be charged a flat stormwater management fee, equal the base rate, regardless of the size of the parcel or the improvements.

### (c) Other Developed Property Fee



The fee for other developed property (non-single family residential property) in the municipality shall be set by dividing the total square footage of impervious area of the property by one ERU and then multiplying that factor by the base rate for one ERU. The impervious surface area for other developed property is the square footage for the buildings and other improvements on the property. The minimum stormwater management fee for other developed property shall equal the base rate for single-family residential property.

(d) Base Rate

The governing body of the municipality shall establish the base rate for one ERU. The base rate shall be calculated to insure adequate revenues to fund the costs of stormwater management and to provide for the operation, maintenance, and capital improvements of the stormwater system in the city. The base rate will be calculated by dividing the necessary annual revenues for funding the program by the total number of ERUs, as determined by the Department, and then dividing by 12 months to make the base rate a monthly value.

(e) Adjustments to Stormwater User's Fee

The Department shall have the right on its own initiative to adjust upward or downward the stormwater user's fee with respect to any property, based on the approximate percentage on any significant variation in the volume or rate of stormwater, or any significant variation in the quality of stormwater, emanating from the property, compared to other similar properties. In making determinations of the similarity of property, the Department shall take into consideration the location, geography, size, use, impervious area, stormwater facilities on the property, and any other factors that have a bearing on the variation. Under no circumstances shall a stormwater fee be adjusted to the point that it is below the base rate for one ERU unless the person requesting the adjustment can demonstrate that they do not discharge any stormwater to the MS4 system, in which case the stormwater fee shall be waived.

(f) Property Owner to Pay Stormwater User's Fee

For each property for which a stormwater fee is assessed, the stormwater fee shall be paid by the owner of the property. This person shall be designated as the user of the stormwater system.

(g) Stormwater User's Fee Payment

Payment of the stormwater user's fee shall be made in person or by mail along with the bill to which it is attached. The due date of the stormwater fee shall be as indicated on the bill. The municipality shall be entitled to recover legal fees incurred in collecting delinquent stormwater fees.

(h) Appeal of Fees

Any person who disagrees with the calculation of the stormwater user's fee, as provided in this ordinance, or who seeks a stormwater user's fee adjustment based upon stormwater management practices, may appeal such fee determination to the Director of the Department of Public Works. The appeal shall be filed in writing and shall state the grounds for the appeal. The Director may request additional information from the appealing party. Based upon the information provided by the Department and the appealing party, the Director shall make a final calculation of the stormwater user's fee. The Director shall notify the appealing party, in writing, of its decision.

## 16.0 FLOODWAY / FLOODWAY FRINGE REQUIREMENTS

### 16.1 Purpose

It is the purpose of this section to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. This section is designed to:

- (a) Restrict or prohibit uses which are vulnerable to water or erosion hazards, or which cause damaging increases in erosion, flood heights, or flow velocities;
- (b) Control filling, grading, dredging and other development which may increase erosion or flood damage;
- (c) Control the alteration of natural floodplains, stream channels, and natural protective barriers which accommodate flood waters;
- (d) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards.

### 16.2 Flood Districts

The City of Tullahoma shall recognize two distinct flood districts within the boundaries of the municipality. The two flood districts are described as follows:

(a) Floodway District

The floodway shall be described as that area including the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation. The floodway district shall be defined in one of the two following ways:

- (1) Most streams within the City of Tullahoma have been mapped by the Federal Emergency Management Agency (FEMA) to show the floodway and other flood districts. Where FEMA has established the floodway on official Community Panel Maps, then the City shall use the floodway designation provided by FEMA.
- (2) Not all streams have been mapped by FEMA to show floodway areas. For those streams where the floodway has not been mapped by FEMA, the floodway shall be defined as an area on each side of the stream that is equal to two widths of the stream. The floodway area shall be measured from the edge of water when the stream is at normal flow conditions.

(b) Floodway Fringe District

The floodway fringe district shall be described as the area between the floodway boundary and the 100-year floodplain boundary. The flood fringe district shall be defined in one of the two following ways:

- (1) Most streams within the City of Tullahoma have been mapped by FEMA to show the 100-year floodplain boundary and the floodway. Where FEMA has established the 100-year floodplain boundary on official Community Panel Maps, then the City shall use the flood fringe designation provided by FEMA.
- (2) Not all streams have been mapped by FEMA to show the 100-year floodplain areas. Areas designated as Zone A on the Community Panel Maps are an approximation of the 100-year floodplain boundary, but no base flood elevation has been established. For those areas designated on the

Community Panel Maps as Zone A, the 100-year floodplain shall be designated as an area that extends 100 feet, in every direction, beyond the Zone A area shown.

The area designated as Floodway Fringe on unmapped streams may be challenged by the applicant for any Land Disturbance and Stormwater Protection Permit. The applicant may choose to determine a Base Flood Elevation for the area using one of the methods described in FEMA Manual 265, titled "Managing Floodplain Development in Approximate Zone A Areas – A Guide for Obtaining and Developing Base Flood Elevations", dated April 1995. All data utilized to obtain the Base Flood Elevation shall be submitted to the Department of Public Works for review and approval.

### 16.3 Generally Acceptable Uses in Flood Prone Districts

All land disturbing activities require that a permit application be submitted to the Department of Public Works, but in general, the following types of activities will be considered for approval within flood prone districts:

#### (a) Floodway District

Land use activities are highly restricted within floodway districts. Only land use activities that do not result in a restriction to the flows of the floodway will be accepted. Typical uses that can be approved within the floodway district include projects such as sidewalks, underground utilities, and certain types of recreational facilities. Land disturbance activities that fall within the buffer zone requirements of Section 4.4 (p) of this Ordinance must receive a buffer zone variance to develop property within the buffer zone.

#### (b) Flood Fringe District

Land disturbance activities are much less restricted within the flood fringe district but will require that certain conditions be met as a part of the development. Land use activities in the flood fringe district can include the construction of structures, including those that are intended for housing purposes.

### 16.4 Permit Requirements

All proposed land disturbance activities within either of the flood districts will require that a Land Disturbance and Stormwater Protection Permit be

issued prior to the start of construction. In addition to the requirements of Section 4.3 of this Ordinance, the following information shall be provided with the permit application:

(a) Floodway District

For proposed developments within the floodway district to be considered, the application must satisfactorily demonstrate that the project will have no affect on the base flood elevations of the floodway either during or after construction. Developments that include above ground structures or fill material will not generally be accepted.

(b) Flood Fringe District

For proposed developments within the flood fringe district, the application shall demonstrate how the following conditions will be met:

- (1) All fill material that is placed in the flood fringe at or below the base flood elevation must be offset by an equal volume of cut material removed from the same elevation as the fill and must be removed from the flood fringe area completely.
- (2) No building or structure shall be erected and no existing building or structure shall be extended or moved unless the main floor of said building or structure is placed at least one (1) foot above the base flood elevation. An Elevation Certificate shall be submitted and approved. No basement floor or other floor shall be constructed below or at a lower elevation than the main floor. Foundations of all structures shall be designed and constructed to withstand flood conditions at the site.
- (3) Fill material placed for a structure shall extend twenty-five (25) feet beyond the limits of any structure erected thereon. Minimum fill elevation shall be to at least the base flood elevation. Fill shall consist of soil or rock materials only and shall be thoroughly compacted to prevent excessive settlement and shall be protected from erosion. Fill slopes shall not be steeper than one (1) foot vertical to two (2) feet horizontal unless steeper slopes are justified and approved by the Department of Public Works.